

10/509000

CofC

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of

ADACHI, Y. et al.

Atty. Ref.: FPP-1035-539

Patent No. 7,435,477 B2

Issued: October 14, 2008

For: PARTICULATE WATER ABSORBENT CONTAINING
WATER ABSORBENT RESIN AS A MAIN COMPONENT

* * * * *

November 24, 2008 Certificate

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

NOV 26 2008

of Correction

Sir:

REQUEST FOR A CERTIFICATE OF CORRECTION

The patentee in the above-identified patent hereby requests that the Patent and Trademark Office issue an official Certificate of Correction pursuant to 37 C.F.R. § 1.322 for the following error made by the Patent Office.

Front Page, Column 1, (73), there is a misspelling in the Assignee's name which is listed as "Nippon **Shokubi** Co., Ltd." and instead it should read as "Nippon **Shokubai** Co., Ltd.

Since the error arose on the part of the Patent and Trademark Office, no fee is believed necessary for securing issuance of the Certificate.

Attached hereto is a draft Official Certificate of Correction for use by the Patent and Trademark Office correcting the above-identified matter.

NOV 26 2008

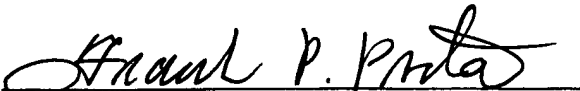
ADACHI, Y. et al.

Patent No. 7,435,477

The Commissioner is hereby authorized to charge any deficiency in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our **Account No. 14-1140**.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 
Frank P. Presta
Reg. No. 19,828

FPP:lcb
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100

NOV 26 2008

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 7,435,477 B2
DATED : October 24, 2008
INVENTOR(S) : ADACHI, Y. et al.

It is certified that error appears in the above-identified patent and that said letters patent is hereby corrected as shown below:

Front page, column 1, (73) Assignee: Nippon **Shokubi** Co., Ltd., Osaka (JP)

The Assignee should be listed as Nippon **Shokubai** Co., Ltd.

MAILING ADDRESS OF SENDER:

Frank P. Presta
NIXON & VANDERHYE P.C.
901 North Glebe Road, 11th Floor
Arlington, Virginia 22203

Form PTO 1050 (Rev. 2-93)

PATENT NO. 7,435,477 B2

No. of addi
@ 50¢ per page

NOV 26 2008
+



US001435477B2

(12) **United States Patent**
Adachi et al.(10) **Patent No.:** **US 7,435,477 B2**
(45) **Date of Patent:** **Oct. 14, 2008**(54) **PARTICULATE WATER ABSORBENT
CONTAINING WATER ABSORBENT RESIN
AS A MAIN COMPONENT**(75) Inventors: **Yoshifumi Adachi, Himeji (JP);
Takahiro Kitano, Himeji (JP);
Hirotama Fujimaru, Kishiwada (JP);
Hiroyuki Ikeuchi, Himeji (JP);
Katsuyuki Wada, Himeji (JP)**(73) Assignee: **Nippon Shokubi Co., Ltd., Osaka (JP)**(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 852 days.

5,994,440	A	11/1999	Staples et al.
6,087,002	A	7/2000	Kimura et al.
6,107,358	A	8/2000	Harada et al.
6,127,454	A	10/2000	Wada et al.
6,150,582	A	11/2000	Wada et al.
RE37,021	E	1/2001	Aida
6,184,433	B1	2/2001	Harada et al.
6,194,531	B1	2/2001	Hatsuda et al.
6,297,335	B1	10/2001	Funk et al.
6,414,214	B1	7/2002	Engelhardt et al.
6,444,744	B1	9/2002	Fujimaru et al.
6,562,879	B1	5/2003	Hatsuda et al.
6,586,549	B1	7/2003	Hatsuda et al.
2001/0049514	A1	12/2001	Dodge et al.
2002/0165288	A1	11/2002	Frenz et al.

(21) Appl. No.: **10/509,000**(22) PCT Filed: **Feb. 9, 2004**(86) PCT No.: **PCT/JP2004/001358**§ 371 (c)(1),
(2), (4) Date: **Sep. 27, 2004**(87) PCT Pub. No.: **WO2004/069404**PCT Pub. Date: **Aug. 19, 2004**(65) **Prior Publication Data**

US 2005/0221980 A1 Oct. 6, 2005

(30) **Foreign Application Priority Data**Feb. 10, 2003 (JP) 2003-032770
Mar. 13, 2003 (JP) 2003-068579(51) **Int. Cl.**
B32B 5/16 (2006.01)(52) **U.S. Cl.** **428/407; 428/500; 428/507;
525/326.7; 525/328.5; 525/328.8; 525/328.9;
525/329.4; 525/329.6; 525/329.9; 525/330.1;
525/380; 525/382; 525/384**(58) **Field of Classification Search** **525/330.1,
525/326.7, 328.5, 328.8, 328.9, 329.4, 329.6,
525/329.9; 428/407, 500, 507**

See application file for complete search history.

(56) **References Cited****U.S. PATENT DOCUMENTS**

RE32,649	E	4/1988	Brandt et al.
5,061,259	A	10/1991	Goldman et al.
5,140,076	A	8/1992	Hatsuda et al.
5,147,343	A	9/1992	Kellenberger
5,149,335	A	9/1992	Kellenberger et al.
5,419,956	A	5/1995	Roe
5,453,323	A	9/1995	Chambers et al.
5,462,972	A	10/1995	Smith et al.
5,562,646	A	10/1996	Goldman et al.
5,601,542	A	2/1997	Melius et al.
5,669,894	A	9/1997	Goldman et al.
5,712,316	A	1/1998	Dahmen et al.
5,760,080	A *	6/1998	Wada et al. 524/559
5,797,893	A	8/1998	Wada et al.
5,843,059	A	12/1998	Niemeyer et al.

FOREIGN PATENT DOCUMENTS

EP	0532002	A1	3/1993
EP	0605215	A1	6/1994
EP	0629411	A1	12/1994
EP	0712659	A1	5/1996
EP	0707603	B1	9/1997
EP	0937739	A2	8/1999
EP	0940148	A1	9/1999
EP	1029886	A2	8/2000
EP	1153656	A2	11/2001
GB	2267094	A	11/1993
JP	63-275608	A	11/1988
JP	11-43508	A	2/1999
JP	11-58615	A	3/1999
JP	2000-302876	A	10/2000

(Continued)

OTHER PUBLICATIONSOffice Action mailed Jun. 23, 2006 by the Chinese Patent Office for
corresponding Chinese Application No. 200480000104.7.*Primary Examiner*—Bernard Lipman(74) *Attorney, Agent, or Firm*—Nixon & Vanderhye P.C.(57) **ABSTRACT**

A particulate water absorbent contains a water absorbent resin as a main component, the water absorbent resin being a crosslinked polymer of a water-soluble unsaturated monomer. The water absorbent resin is particular in shape and contains particles of a particle size in a range of not less than 106 μ m and less than 850 μ m in an amount of not less than 90 mass percent with respect to the total mass of the water absorbent resin contained in the particulate water absorbent. The particulate water absorbent has a first salt concentration absorption index of not less than 0.60 as measured by a formula below when ion exchange water is used as an aqueous solution of a constant salt concentration: (salt concentration absorption index)=(absorbency against a pressure of 4.83 kPa with respect to the aqueous solution of a constant salt concentration)/(absorbency against no pressure with respect to the aqueous solution of a constant salt concentration).

18 Claims, 1 Drawing Sheet**NOV 26 2008**